University of Michigan

Project Name...

Better Health (Tailored Interventions for Multiple Behaviors)

Principal Investigator ...

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Background / Significance of Problem ...

The University of Michigan's Health Media Research Laboratory, in collaboration with Henry Ford Health System, is evaluating the impact of a longitudinal computer-based tailored print intervention and complementary web-based tailored telecounseling intervention among roughly 3,000 HMO enrollees.

Research Question ...

Through a randomized, 2x2 factorial trial, we are determining effectiveness of the interventions, both individually and in combination, in achieving behavior change in three targeted health risk behaviors: low vegetable consumption, cigarette smoking, and sedentary behavior. Three- and twelve-month behavioral effects of the individual and combined treatments are being evaluated.

Features of the project include: (1) use of multiple eHealth strategies, including the web, computer-tailored print, and the electronic medical record; (2) interaction of eHealth tools with a trained health specialist; and (3) implementation in a realistic, generalizable setting.

Findings To-Date ...

Current follow-up data provide sufficient power to examine intervention effects on vegetable consumption. Tailored print materials resulted in a .41 serving improvement in vegetable consumption three months after baseline assessment versus a .08 serving improvement among those not receiving tailored print (p=.02). This difference was greater among African American subjects (.61 versus -.16 serving improvement; p=.02).

Implications ...

[for multibehavioral and multi-theoretical approaches to behavior change]

At this stage of the trial, the tailored print material intervention is demonstrating a significant effect on vegetable consumption. We have not found this effect in the telecounseling intervention, which has not demonstrated a significantly effect on vegetable consumption, nor have we found a synergistic effect of both tailored print materials and telecounseling. Results to-date suggest that an inexpensive, high-reach program can be effective in enhancing vegetable consumption if it is tailored to the specific needs and interests of the user.

[SUMMARY REPORT]

Future Research Directions ...

Tailored programs should be further tested on the World Wide Web, a far less expensive alternative to tailored print materials. These programs should also be examined for their effectiveness in maintaining long-term behavioral change.